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DECL RATION AND POWER OF AT ORNEY FOR ORIGINAL U.S. PATENT APPLICATION

Attorney's Docket No. READPOO7

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

SYNTHETIC ANTIFERROMAGNETIC PINNED LAYER WITH FE/FESI/FE SYSTEM, the specification of which,

SYNTHETIC AND	TIFERROMA	GNETIC PINNED I	AYER WITH FE/FESI/FE SYST	EM, the specification of which,
(check one)	1. 🛛	is attached hereto).	
	2.	was filed on		as
		U.S. Application	Serial No.	
			d on	
	3. 🔲	was filed on		a s
			Γ Application Serial No	
		and was amended	i on	·
I hereby state that I by any amendment			e contents of the above-identified	specification, including the claims, as amended
I acknowledge the CFR § 1.56.	duty to disclo	se information whic	th is material to the examination	of this application in accordance with Title 37,
patent or inventor's United States, listed	s certificate, or d below and ha	§ 365(a) of any PC ive identified below.	CT International application which	d) or § 365(b) of any foreign application(s) for h designated at least one country other than the n application for patent or inventor's certificate, which priority is claimed:
Prior Foreign App	olication(s)			Priority Benefits Claimed? Yes No
(Appl. No.)		(Country)	(Filing Date)	
		· ,		Yes No
(Appl. No.)		(Country)	(Filing Date)	
				Yes No
Appl. No.)		(Country)	(Filing Date)	
hereby claim the b	enefit under 3	5 U.S.C. §119(e) of	any United States provisional app	olication(s) listed below:
				•
Application Serial	No.)	(Filing D	Pate)	

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

(Filing Date)

Attny Docket No. READP007

(Application Serial No.)

Prior U.S. Application(s)		, T	
(Application Serial No.)	(Filing Date)	(Status - patented, pending, ab	andoned)
(Application Serial No.)	(Filing Date)	(Status - patented, pending, ab	pandoned)
No. 32,043); Albert S. Penil Raymis H. Kim (Reg. No. 39	firm of Hickman & Martine, including the last of the l	oleman (Reg. No. 39,145); Dawn my principal attorneys to prosecute	L. Palmer (Reg. No. 41,238)
Send Correspondence To:	Dawn L. Palmer HICKMAN & M P.O. BOX 52037 Palo Alto, Califo		
Direct Telephone Calls To:	·	elephone number (650) 470-7430	
are believed to be true; and furmade are punishable by fine or false statements may jeopardiz	nents made herein of my own knowle orther that these statements were ma r imprisonment, or both, under secti- te the validity of the application or an	de with the knowledge that willful on 1001 of Title 18 of the United St	false statements and the like so
Typewritten Full Name of Sole or First Inventor:	Chih-Huang Lai	Citizenship:	TAIWAN
Inventor's signature:	Ship- Hung	Date of Signature:_	"/13/98"
Residence: (City)	Hsinchu	(State/Country)	Taiwan
Post Office Address:	Department of Materials Science	e and Engineering, National Tsing	Hua University.
·	101, Sec. 2, Kuang Fu Road, H	sinchu, 30043, Taiwan	
Full Name of Second Joint Inventor (if any):	Zhupei Shi	Citizenship:	CHINA
Inventor's signature:	Thipe sho	Date of Signature:	11/13/98
Residence: (City)	San Jose	(State/Country)	California/USA
Post Office Address:	3245 Chateau Du Lac, San Jose	, California 95138	
Full Name of Third Joint Inventor (if any):	Hua-Ching Tong	Citizenship:	USA
Inventor's signature:	The ling by	Date of Signature:	US
Residence: (City)	San Jose	(State/Country)	California/USA

Attny Docket No. READP007

Post Office Address:

Page 2 of 3

7184 Josslyn Drive, San Jose, California 95120

Full Name of Fourth Joint Inventor (if any):	Robert E. Rottmayer	Citizenship:	USA
Inventor's signature:		Date of Signature:	
Residence: (City)	Fremont	(State/Country)	California/USA
Post Office Address:	2181 Ocaso Camino, Fremont, Californi	ía 94539	
Full Name of Fifth Joint Inventor (if any):	Charles W. Miller	Citizenship:	USA
Inventor's signature:		Date of Signature:	
Residence: (City)	San Jose	(State/Country)	California/USA
Post Office Address:	6592 Woodcliff Court, San Jose, Califor	nia 95120	·

DEC ARATION AND POWER OF A CORNEY FOR ORIGINAL U.S. PATENT APPLICATION

Attorney's Docket No. READPOOT

As a below-named inventor, I hereby declare that:

-My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: SYNTHETIC ANTIFERROMAGNETIC PINNED LAYER WITH FE/FESI/FE SYSTEM, the specification of which,

(cneck one)	1.	is anached hereto.		
	2. 🔲	U.S. Application Seria	al No.	
	3.	was filed on International PCT App and was amended on _	plication Serial No.	as
I hereby state that I h by any amendment re	ave reviewed eferred to abo	and understand the conve.	itents of the above-identif	led specification, including the claims, as amended
I acknowledge the du CFR § 1.56.	ity to disclose	e information which is 1	material to the examination	on of this application in accordance with Title 37,
patent or inventor's c United States, listed b	ertificate, or elections and have	§ 365(a) of any PCT Intentified below, by c	ternational application wheelering the box, any fore	a)-(d) or § 365(b) of any foreign application(s) for hich designated at least one country other than the eign application for patent or inventor's certificate, in which priority is claimed:
Prior Foreign Applic	cation(s)			Priority Benefits Claimed? Yes No
(Appl. No.)	 .	(Country)	(Filing Date)	
(Appl. No.)		(Country)	(Filing Date)	Yes No
(Appl. No.)		(Country)	(Filing Date)	Yes
I hereby claim the ben	efit under 35	U.S.C. §119(e) of any [application(s) listed below:
(Application Serial No	·)	(Filing Date)		
Application Serial No	.)	(Filing Date)		

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Attny Docket No. READP007

(Application Serial No.)	(Filing Date)	(Status - patented, pending, abandoned)		
(Application Serial No.)	(Filing Date)	(Status - patented, pending, abandoned)		
Raymis H. Kim (Reg. N	cuma (Reg. 170, 35,46/1: Brish R	uding Paul L. Hickman (Reg. No. 28,516); Peter B. Mart Coleman (Reg. No. 39,145); Dawn L. Palmer (Reg. No. as my principal attorneys to prosecute this application and to with:		
Send Correspondence T	HICKMAN & I P.O. BOX 5203'	MARTINE, LLP		
Direct Telephone Calls T	o: Dawn L. Palmer at	telephone number (650) 470-7430		
made are punishable by fi	d fultier mat mese statements were m	ledge are true and that all statements made on information a ade with the knowledge that willful false statements and the ion 1001 of Title 18 of the United States Code, and that such patent issuing thereon. Citizenship: TAIWAN	a 1:14	
Inventor's signature:		Date of Signature:		
Residence: (City)	Hsinchu			
		(State/Country) Taiwan		
• •	Department of Materials Scien	(State/Country) Taiwan ce and Engineering, National Tsing Hua University.		
• •	Department of Materials Scien	ce and Engineering, National Tsing Hua University.		
ost Office Address: ull Name of Second Joint		ce and Engineering, National Tsing Hua University.		
ost Office Address: ull Name of Second Joint	101, Sec. 2, Kuang Fu Road, F	ce and Engineering, National Tsing Hua University, Isinchu, 30043, Taiwan Citizenship: CHINA		
ost Office Address: ull Name of Second Joint aventor (if any): aventor's signature:	101, Sec. 2, Kuang Fu Road, F	ce and Engineering, National Tsing Hua University. Isinchu, 30043, Taiwan Citizenship: CHINA Date of Signature:		
cost Office Address: ull Name of Second Joint aventor (if any): aventor's signature: esidence: (City)	101, Sec. 2, Kuang Fu Road, F Zhupej Shi San Jose	ce and Engineering, National Tsing Hua University. Isinchu, 30043, Taiwan Citizenship: CHINA Date of Signature:		
Post Office Address: ull Name of Second Joint nventor (if any): nventor's signature: esidence: (City) ost Office Address: ull Name of Third Joint	101, Sec. 2, Kuang Fu Road, F Zhupej Shi San Jose	ce and Engineering, National Tsing Hua University. Isinchu, 30043, Taiwan Citizenship: CHINA Date of Signature: (State/Country) California/USA California 95138		
Post Office Address: Full Name of Second Joint nventor (if any): nventor's signature: desidence: (City) ost Office Address: ull Name of Third Joint	2hupei Shi San Jose 3245 Chateau Du Lac, San Jose	Citizenship: California/USA Citizenship: California/USA Citizenship: USA		

Attny Docket No. READP007

Post Office Address:

Page 2 of 3

7184 Josslyn Drive, San Jose, California 95120

T THE LANGUE OF LOW HE SOTH	L		
Inventor (if any):	Robert E. Rottmayer	Citizenship:	USA
Inventor's signature:	Aut S Fortmayer	Date of Signature;	11/17/98
Residence: (City)	Fremont	(State/Country)	California/USA
Post Office Address:	2181 Ocaso Camino, Fremont, California	94539	
Full Name of Fifth Joint Inventor (if any):	Charles W. Miller	Citizenship:	USA
Inventor's signature:		Date of Signature:	
Residence: (City)	San Jose	(State/Country)	California/USA
Post Office Address:	6592 Woodcliff Court, San Jose, Californ	ia 95120	·

DECY \RATION AND POWER OF ACTORNEY FOR URIGINAL U.S. PATENT APPLACATION

Attorney's Docket No. READPOOT

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

SYNTHETIC ANTIFERROMAGNETIC PINNED LAYER WITH FE/FESI/FE SYSTEM, the specification of which,

	1. 🛚	is attached heret	io.	
,	2. 🔲	was filed on		as
		U.S. Application	serial No.	
\$,		and was amende	ed on	·
	3. 🔲	was filed on	·····	as
		International PC	T Application Serial No.	
		and was amendo	d on	
hereby state that I by any amendment			e contents of the above-identified	d specification, including the claims, as amend
acknowledge the	duty to disclos	e information which	ch is material to the examination	of this application in accordance with Title 3
atent or inventor's	certificate, or	§ 365(a) of any PC	CT International application whic	(d) or § 365(b) of any foreign application(s) for the designated at least one country other than the designation of the designati
atent or inventor's Inited States, listed r PCT Internationa	certificate, or below and have all application h	§ 365(a) of any P(ve identified below	CT International application whic	th designated at least one country other than the application for patent or inventor's certificate which priority is claimed: Priority Benefits Claimed?
atent or inventor's Inited States, listed	certificate, or below and have all application h	§ 365(a) of any P(ve identified below	CT International application which, by checking the box, any foreign before that of the application on which is the application of the application on which is the application of the ap	th designated at least one country other than the application for patent or inventor's certificate which priority is claimed:
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atent or inventor's Inited States, listed r PCT Internationa rior Foreign Appl Appl. No.)	certificate, or below and have all application h	§ 365(a) of any Pove identified below aving a filing date	CT International application which, by checking the box, any foreign before that of the application on which is the application of the application on which is the application of the ap	th designated at least one country other than the application for patent or inventor's certificate which priority is claimed: Priority Benefits Claimed?
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atent or inventor's Inited States, listed r PCT Internationa rior Foreign Appl Appl. No.) Appl. No.)	certificate, or l below and have lapplication had lication(s)	§ 365(a) of any Pove identified below aving a filing date (Country) (Country)	T International application which, by checking the box, any foreign before that of the application on which will be the second of the application on which will be the second of the application on which will be the second of the application on which will be the second of the application on which will be the second of the application on which will be the second of the application of the appli	th designated at least one country other than the application for patent or inventor's certificate which priority is claimed: Priority Benefits Claimed? Yes No Yes No
atent or inventor's Inited States, listed r PCT Internationa rior Foreign Appl Appl. No.) Appl. No.)	certificate, or l below and have lapplication had lication(s)	§ 365(a) of any Pove identified below aving a filing date (Country) (Country)	(Filing Date) (Filing Date)	th designated at least one country other than the application for patent or inventor's certificate which priority is claimed: Priority Benefits Claimed? Yes No Yes No

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

(Filing Date)

Attny Docket No. READP007

(Application Serial No.)

Prior U.S. Application(s)			
(Application Serial No.)	(Filing Date)	(Status - patented, pending, a	bandoned)
(Application Serial No.)	(Filing Date)	(Status - patented, pending, a	bandoned)
No. 32,043); Albert S. Peni Raymis H. Kim (Reg. No. 3)	firm of Hickman & Martine, included the firm of Hickman & Martine, included the R. C. (13,247) as Trademark Office connected the rewise the rew	oleman (Reg. No. 39,145); Dawi my principal attorneys to prosecu	I D' Latines (vef- 110, 471200)
Send Correspondence To:	Dawn L. Palmer HICKMAN & M P.O. BOX 52037 Palo Alto, Califor		
Direct Telephone Calls To:	Dawn L. Palmer at t	elephone number (650) 470-7430	
are believed to be true; and fi	nents made herein of my own knowlerther that these statements were may imprisonment, or both, under section the septication or a	de with the knowledge that willfu on 1001 of Title 18 of the United (I talse statements and the like so
Typewritten Full Name of Sole or First Inventor:	Chih-Huang Lai	Citizenship:	TAIWAN
Inventor's signature:		Date of Signature:_	
Residence: (City)	Hsinchu	(State/Country)	Taiwan
Post Office Address:	Department of Materials Scien	ce and Engineering, National Tsing	Hua University.
	101, Sec. 2, Kuang Fu Road, H	Isinchu, 30043, Taiwan	
Full Name of Second Joint Inventor (if any):	Zhupei Shi	Citizenship:	CHINA
Inventor's signature:		Date of Signature:_	
Residence: (City)	San Jose	(State/Country)	California/USA
Post Office Address:	3245 Chateau Du Lac, San Jose	California 95138	
Full Name of Third Joint Inventor (if any):	Hus-Ching Tong	Citizenship:	UŞA
Inventor's signature:		Date of Signature:	
Residence: (City)	San Jose	(State/Country)	California/USA

Atmy Docket No. READP007

Page 2 of 3

7184 Josslyn Drive, San Jose, California 95120

Inventor (if any):	Robert E. Rottmayer	Citizenship:	USA
Inventor's signature:		Date of Signature:_	
Residence: (City)	Fremont	(State/Country)	California/USA
Post Office Address:	2181 Ocaso Camino, Fremont, Californi	a 94539	
Full Name of Fifth Joint Inventor (if any):	Charles W. Miller	Citizenship:	USA
Inventor's signature:	(hunder W. Miller)	Date of Signature:	11/23/98
Residence: (City) _	San Jose	(State/Country)	California/USA
Post Office Address:	6592 Woodcliff Court, San Jose, Califon	nia 95120	